

IN THE CLAIMS:

Please cancel claim 10 without prejudice.

1. (4X Amended) A device for the automatic photoelectric measurement of measuring fields contained on an original, the device comprising:

a housing having an insertion opening for insertion of the original, said original having a front edge and a rear edge;

a transport structure for automatically pulling the original into the housing and for transporting the original along a transport path;

a detector of a photoelectric measurement arrangement for providing light of a defined quality to measuring fields contained on the original, for receiving measurement light being remitted or transmitted from the measuring fields pending on the original, and for converting the measurement light into electrical signals representing the colour characteristics of the measuring fields, said photoelectric measurement arrangement being a spectral measurement arrangement, for generating electrical signals representing the spectra of the measured measuring fields on the original; and

a controller for cooperating with the transport structure and the spectral measurement arrangement for controlling the pulling in and transport of the original, for converting the electrical signals generated by the spectral measurement arrangement into digital measuring data, and for supplying said digital measuring data to an interface for access by an external computer and further processing;

wherein configuration data representing the arrangement of the measuring fields on the original for a plurality of different types of originals is stored in the controller; said controller being designed for determining from generated digital measuring data of pre-defined code fields an original identification code specific for the type of original and defined by colours of the pre-defined code fields, for selecting stored configuration data based on the determined original identification code for the type of original that contains said identification code, and for controlling the measurement of individual measuring fields on the original based on the selected configuration data, and

wherein the controller determines whether the front edge or the rear edge of the original first enters the insertion opening of the housing, and

wherein the controller is designed for determining a positioning code on the original, said positioning code being formed through colours of pre-defined positioning fields, said controller determining the positioning code from digital measuring data generated from said positioning fields, and controlling the measurement of the individual measuring fields of the original using the positioning code.

Claim 2 (canceled).

Claim 3 (previously presented) The device of claim 1 comprising:

An adjustment structure controlled by the controller, the adjustment structure adjusting the spectral measurement arrangement transversely to the transport path of the original, such that measuring fields of an original having a two-dimensional measuring field arrangement can be measured.

Claim 4 (previously presented) The device of claim 2, wherein an adjustment structure adjusts the densitometric measurement arrangement transversely to the transport path of the original.

Claim 5. (previously presented) The device of claim 3, wherein the spectral measurement arrangement performs transmission measurements and includes a light source for shining light through a transparent original, said light source being transversely adjustable together with the spectral measurement arrangement.

Claim 6.(previously presented) The device wherein the densitometric measurement arrangement performs transmission measurements and includes a light source for shining light through a transparent original, said light source being transversely adjustable together with the densitometric measurement arrangement.

Claim 7 (previously presented) The device of claim 3 comprising:

a white reference field, wherein the adjustment structure positions the spectral measurement arrangement near the white reference field under the control of the controller, the spectral measurement arrangement spectrally measuring the white reference field, said controller performing an automatic white-calibration based on the spectral measuring data of the white reference field.

Claim 8 (canceled).

Claim 9 (previously presented) The device of claim 1, wherein the controller determines an original identification code from digital measuring data generated by code fields, said original identification code being formed through colours of defined code fields, said controller forming corresponding digital original identification data from the original identification code and assigning said original identification data to digital measuring data of the respective original.

Claim 10 (canceled)

Claim 11 (previously presented) The device of claim 1, comprising:

a bar code reader which is connectable to the controller and interacts with the controller, said bar code reader reading an original identification code in the form of a bar code into the controller, said controller assigning the retrieved original identification code or original identification data derived therefrom to digital measuring data of the respective original.

Claim 12 (previously presented) The device of claim 1, wherein the transport path inside the housing is substantially U-shaped such that the original is redirected by substantially 180°.

Claim 13 (previously presented) The device of claim 12, wherein the transport path extends from the insertion opening to a first exit opening, said first exit opening being disposed on a same side of the housing as the insertion opening.

Claim 14 (previously presented) The device of claim 13, wherein a second exit opening is provided on a side of the housing opposite to the insertion opening, and wherein the transport path is adjustable such that said transport path extends from the insertion opening to one of the first exit opening and the second exit opening.

Claim 15 (previously presented) The device of claim 1 comprising:

a serial interface for a bi-directional communication with the external computer, said serial interface being in cooperation with the controller, for transfer of digital measuring data to the external computer and for control of the function and configuration of the device by means of the external computer.

Claim 16 (previously presented) The device of claim 1, comprising:

a USB interface for a bi-directional communication with the external computer, said USB interface being in cooperation with the controller, for transfer of digital measuring data to the external computer and for control of the function and configuration of the device by means of the external computer.

Claim 17 (previously presented) The device of claim 1, comprising:

a network interface for a bi-directional communication with the external computer via a data network, said network interface being in cooperation with the controller, for transfer of digital measuring data to the external computer and for control of the function and configuration of the device by means of the external computer.

Claim 18 (previously presented) The device of claim 1, comprising:

a modem for a bi-directional communication with the external computer via a telephone network and/or the Internet, said modem being in cooperation with the controller, for transfer of digital measuring data to the external computer and for control of the function and configuration of the device by means of the external computer.

Claim 19 (previously presented) The device of claim 17, comprising:

an extension connection for providing a modular connection between the network interface and the controller.

Claim 20 (previously presented) The device of claim 18, comprising:

an extension connection for providing a modular connection between the modem and the controller.

Claim 21 (previously presented) The device of claim 1, wherein the controller comprises an e-mail software for, via the interface, sending an e-mail message to the Internet and receiving an e-mail message from the Internet, and wherein the communication with the external computer is carried out via e-mail.

Claim 22 (previously presented) The device of claim 21, wherein the controller is operable for sending digital measuring data, and configuration and control data, as an e-mail attachment to the external computer, and for receiving digital measuring data, and configuration and control data, as an e-mail attachment from the external computer.

Claim 23 (previously presented) The device of claim 22, wherein the controller provides the digital measuring data in IT8 format.

Claim 24 (previously presented) The device of claim 22, wherein the controller provides the digital measuring data in an IT8 format and wherein the controller sends the digital measuring data as an e-mail attachment in the IT8 format.

Claim 25 (4X Amended) A test original for testing the settings of a photographic production unit, the test original comprising:

a plurality of measuring fields in dependence upon a respective use, wherein the plurality of measuring fields includes a machine-readable code, said code containing information about the type of the original and information about the production unit in which the original is used; and

a code for differentiating a front edge from a rear edge of said test original; and
a positioning code being formed through colours of pre-defined positioning fields,
wherein the positioning code is used for controlling the measurement of the individual
measuring fields of the original.

Claim 26 (previously amended) The test original of claim 25, comprising:

a code for automatically determining an orientation of the original during an insertion process into a measuring device suitable for measuring the measuring fields.

Claim 27 (previously amended) The test original of claim 25, comprising:

a bar code containing information about the production unit in which the original is used.

Claim 28 (previously amended) The test original of claim 25, wherein the code is formed of one or more coloured code fields.

Claim 29 (Amended) A device for photoelectric measurement of measuring fields, the device comprising:

a housing having an insertion opening for insertion of an original, said original having a front edge, a rear edge and containing measuring fields;

a transport structure for transporting the original along a transport path within the housing;

a detector of a photoelectric measurement arrangement for providing light of a defined quality to the measuring fields on the original, for receiving measurement light being remitted or transmitted from the measuring fields on the original, and for converting the measurement light into electrical signals representing the colour characteristics of the measuring fields; and

a controller for cooperating with the transport structure and the spectral measurement arrangement for controlling transport of the original, for converting the electrical signals generated by the photoelectric measurement arrangement into digital measuring data, and for supplying said digital measuring data to an interface for access by a processor;

wherein configuration data is accessible by the controller, said configuration data permitting the controller to determine the type of original based on the arrangement of measuring fields on the original,

wherein the controller determines an identification code from generated digital measuring data of a pre-defined code field on the original, selects configuration data based on the said identification code, and controls measurement of individual measuring fields on the original based on the selected configuration data, ~~and~~

wherein the controller determines whether the front edge or the rear edge of the original first enters the insertion opening of the housing, and

wherein the controller is designed for determining a positioning code on the original, said positioning code being formed through colours of pre-defined positioning fields, said controller determining the positioning code from digital measuring data generated from said positioning fields, and controlling the measurement of the individual measuring fields of the original using the positioning code.

Claim 30 (previously presented) The device as defined in claim 1, further including an additional densitometric measurement arrangement, cooperating with the controller for generating electrical signals representing the colour densities of the measured measuring fields at least for the colours red, blue and green.